

# Anderson-Bolds ~ 216-360-9800

## 48 x 48 Multifunction Counter

### Types DMF6

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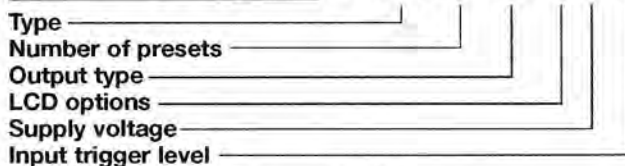
DMF6

- Programmable as counter, tachometer or timer
- Relay or optocoupler output
- Scalable display
- Plug-in screw terminal block
- Wide operating temperature range: -20...+65°C/-4...149°F
- DIN 48x48
- IP65

### Product Description

This multifunction counter has a fast counting input and can be used for a wide range of applications: batch counting with subtraction of faulty pieces, cut to length, speed regulation, ratio measuring, run time.

### Ordering Key **DMF6 1 A10 0 3 00**



Stock items:	1 Preset	2 Presets
	DMF61A100300	DMF62A100300
	DMF61A100000	DMF62A100000
	DMF61A102300	DMF62A102300
	DMF61A102000	DMF62A102000

### Approvals



### Number of Presets

1	1 preset
2	2 presets

### Output Type

A10	Relays
A11 (only DMF62)	Optocoupler

### LCD Options

0	No backlighting
1	Green backlighting
2	LED look, negative, red backlighting
3	Multicolour backlighting

### Supply Voltage

0	90...260VAC
3	10...30VDC (with reverse polarity protection)

### Input Trigger Type

00	Standard (also fixed voltage input available upon request)
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### Input Specifications

<b>Polarity</b>	Programmable for all inputs in common PNP or NPN
<b>Resistance</b>	~ 5kΩ
<b>Count frequency</b>	max. 55kHz
<b>Monitoring/reset input</b>	MPI, lock, gate, reset
<b>Min pulse duration of the inputs</b>	10ms/1ms
<b>Switching levels with AC-supply</b>	
HTL-level	Low: 0...4VDC High: 12...30VDC
<b>Switching levels with DC-supply</b>	
HTL-level	Low: 0...0.2xU <sub>B</sub> High: 0.6xU <sub>B</sub> ...30VDC
<b>Pulse shape</b>	Variable, Schmitt-Trigger

### Package Content

1	Instrument DMF6
1	Mounting clip
1	Screw terminal block 8 pins
1	Screw terminal block 7 pins
1	Multilingual operating manual

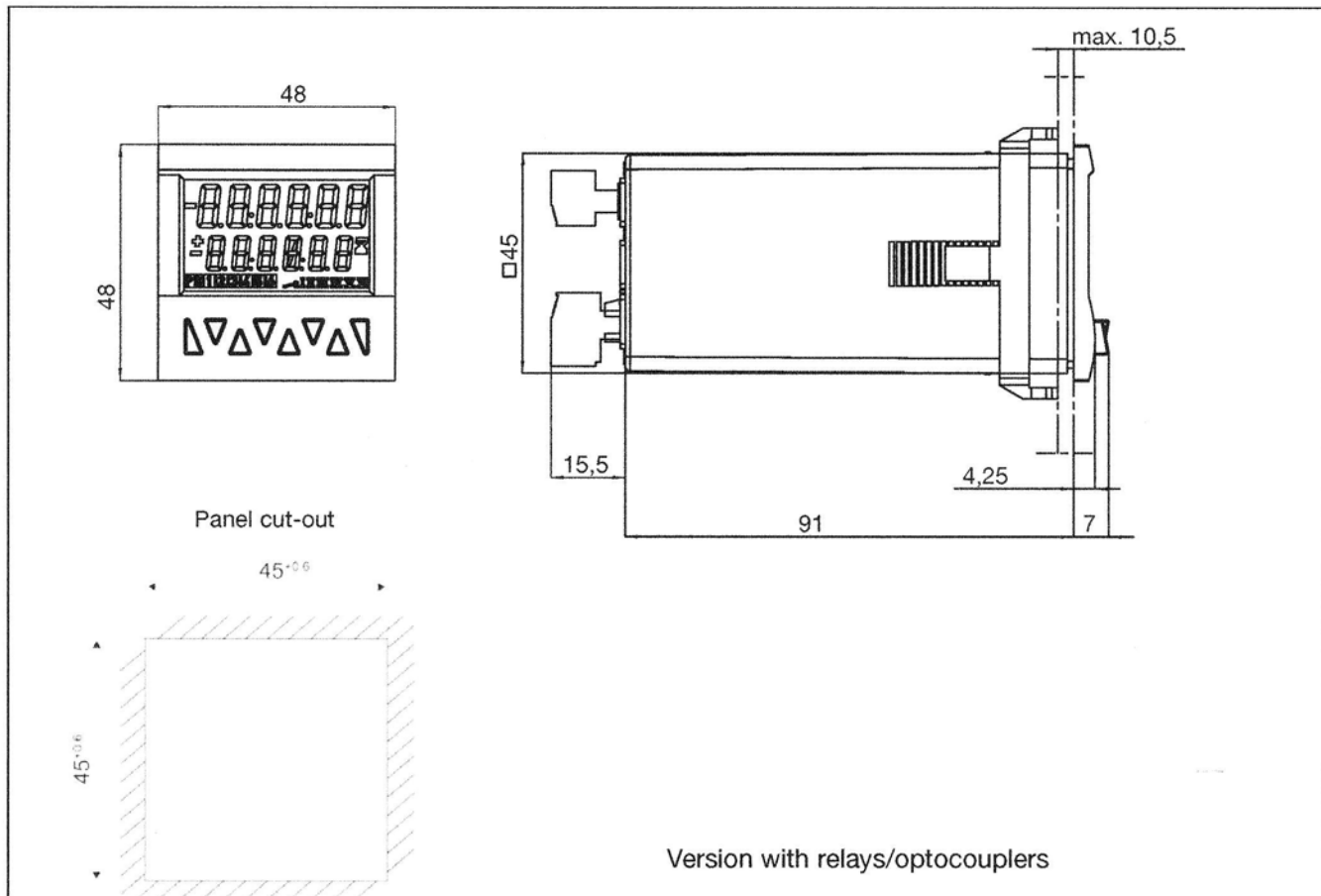
## Output Specifications

<b>Max. Switching voltage</b>	250VAC / 110VDC
<b>Max. Switching current</b>	3A AC / A DC
<b>Min. Switching current</b>	30mA DC
<b>Max. Switching capacity</b>	750VA / 90W
<b>Output 1</b>	
Mech. service life	2 x 10 <sup>7</sup> cycles
N° of cycles @ 3A/250VAC	1 x 10 <sup>5</sup>
N° of cycles @ 3A/30VDC	1 x 10 <sup>5</sup>
Relays	Programmable as normally open (NO) or normally closed (NC)
<b>Output 2</b>	
Mech. service life	20 x 10 <sup>6</sup> cycles
N° of cycles @ 3A/250VAC	5 x 10 <sup>4</sup>
N° of cycles @ 3A/30VDC	5 x 10 <sup>4</sup>
Relays with changeover contact or NPN optocoupler	
Switching power	30VDC/10mA
U <sub>CESAT</sub> @ IC = 10mA	Max. 2.0V
U <sub>CESAT</sub> @ IC = 5mA	Max. 0.4V
<b>Reaction time</b>	
Relay	~7ms
Optocoupler	~1ms
<b>Response time of the frequency counter</b>	
	100 / 600ms
<b>Data retention</b>	min. 10years, E <sup>2</sup> PROM

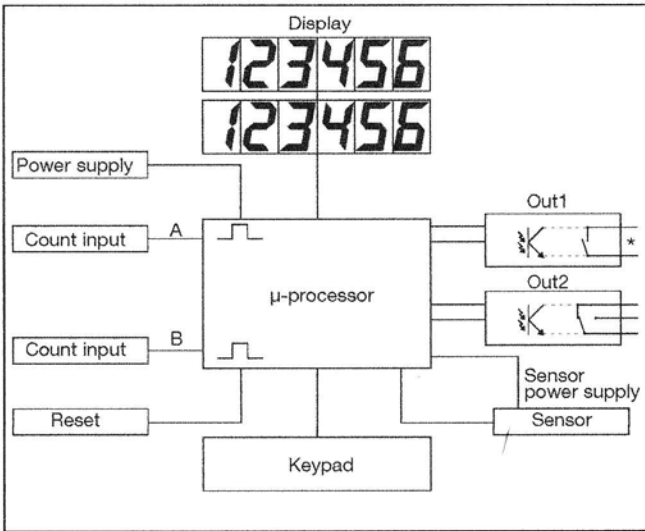
## General Data

<b>Display</b>	2 x 6 digits LCD
<b>Viewing angle</b>	Frontal
<b>Colour of digit figures</b>	LCD or Negative LCD
<b>Current consumption</b>	
AC	8VA
DC	1.5W
<b>Operating temperature</b>	-20...+65°C/-4...149°F
<b>Storage temperature</b>	-25...+50°C/-13...167°F
<b>Mounting position</b>	Panel mounting
<b>Housing colour</b>	Grey RAL 7021
<b>Dimensions</b>	48x48 acc. to DIN 43700 STD
<b>Weight</b>	125g/4.41oz
<b>Protection degree</b>	IP65 (front)
<b>EMC</b>	
emitted:	EN61000-6-4 EN550011 class B
immunity:	EN61000-6-2

## Dimensions (mm/inches)

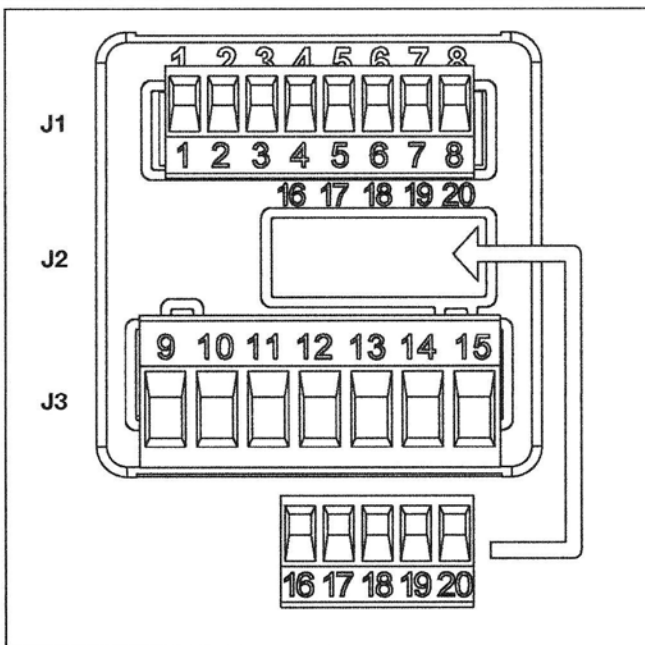


## Block Diagram



\* programmable as NO or NC (non latching relay, in case of power loss the relay becomes NO)

## Connections



### J1 Terminal block

- 1 Sensor voltage supply  
AC: 24VDC / 80mA  
DC: UB interconnected
- 2 GND (0VDC)
- 3 INP A (Signal input A)
- 4 INP B (Signal input B)
- 5 RESET (Reset input)
- 6 LOCK (Key locking input)
- 7 GATE (Gate input)
- 8 MPI (User input)

### J2 Optional Terminal block

- 16 ... 20: expandability with additional cards

### J3 Terminal block

- 9 Relay contact C./Collector
- 10 Relay contact N.O./Emitter
- 11 Relay contact C./Emitter
- 12 Relay contact N.O./not assigned
- 13 Relay contact N.C./ Collector
- 14 AC: 90..260VAC N~  
DC: 10..30VDC
- 15 AC: 90..260VAC L~  
DC: GND (0VDC)

## Optionals

Available expansion cards

- 4 inputs
- 4 additional optocoupler outputs
- 2 additional relays outputs
- RS 485/232 communication interface